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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/711,631   | 09/29/2004  | Arthur I. Watson     | 68.0417               | 5630             |
| 35204  | 7590        | 12/13/2007           | EXAMINER              |                  |
| SCHLUMBERGER RESERVOIR COMPLETIONS<br>14910 AIRLINE ROAD<br>ROSHARON, TX 77583 |             |                      | FULLER, ROBERT EDWARD |                  |
|  |             |                      | ART UNIT              | PAPER NUMBER     |
|  |             |                      | 3676                  |                  |
|  |             |                      | NOTIFICATION DATE     | DELIVERY MODE    |
|  |             |                      | 12/13/2007            | ELECTRONIC       |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[vsolis2@slb.com](mailto:vsolis2@slb.com)

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/711,631             | WATSON ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Robert E. Fuller       | 3676                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 October 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-11,13-20,22-35,39,40,42-45 and 47-51 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 47-51 is/are allowed.  
 6) Claim(s) 1,3-11,13-20,22-35,39,40 and 42-45 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 21 January 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. Applicant's amendment, received October 16, 2007, has been carefully considered. Examiner has maintained some of the rejections set forth in the previous office action, but has also made some new rejections. Therefore, this office action has not been made final.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 26-28 and 30-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Merrill et al. (US 2004/0146415).

With regard to claim 26, Merrill discloses a method for protecting a submersible motor comprising constructing a motive unit (10, 14) having a longitudinal axis for a submersible pumping system with a motor section (14) and a protector section (10) combined; delivering the motive unit to an oil production well as a single unit; and providing the motive unit with a plurality of oil communication holes (see figures 1A and 1B) deployed at an angle of zero with respect to the longitudinal axis such that the angle

of the plurality of oil communication holes corresponds with an angle at which the motive unit is positioned relative to vertical during filling of the motive unit with oil.

With regard to claim 27, the motive unit is prefilled with oil prior to delivering the motive unit into place within the well.

With regard to claim 28, Merrill teaches connecting a motor section shaft with a protector section shaft.

With regard to claim 30, Merrill teaches a coupling sleeve (90).

With regard to claim 32, Merrill discloses journal bearings having replaceable wear sleeves (inner sleeves within bearing assemblies **36** and **86**).

4. Claims 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Shilman (RU 2162272 C1).

With regard to claim 39, Shilman discloses a system for producing fluid, comprising a motor section (1) having an electrical cable connection (5) having a spring biased terminal block (16). The terminal block is biased towards a sealed position, so that fluid communication is allowed when the plug is inserted, and not allowed when the plug is not inserted (see page 4 of the translation, paragraph 3). Shilman also discloses dielectric gaskets (11, 12, 13), as "dielectric" simply means "nonconducting," and Shilman states that his gaskets are "rubber," and therefore nonconducting.

With regard to claim 40, Shilman discloses a protector section (3) permanently coupled to the motor section.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 3-5, 7, 8, 15-19, 25-31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. (US 4,667,737) in view of McAnally (US 5,992,517).

With regard to claim 1, Shaw discloses a system for producing oil, comprising a submersible pump (not shown, but connectable to end of shaft at 5b - see column 3, lines 19-20), and a motive unit to power the submersible pump, the motive unit being a single device with a motor section (1) and motor protector section (10) to seal the motor section from surrounding fluid and to accommodate thermal expansion of an internal lubricating fluid during production of oil, wherein the motive unit comprises a plurality of bearings (26, 48), wherein the motor section comprises a motor section shaft (1d) and the motor protector section comprises a motor protector section shaft (5), the motor section shaft and the motor protector section shaft being axially affixed to each other.

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The motor shaft and motor protector shaft are axially affixed with reference to an axis transverse to the longitudinal axis of the motive unit. The splined connection of the two shafts prevents movement, or wobbling, of the shafts in a direction transverse to said longitudinal axis.

Shaw fails to disclose the plurality of bearings having self-lubricating bushings.

McAnally discloses a submersible pump apparatus for producing fluid from a well. McAnally teaches the use of "bearing sleeve[s] of...polymer materials" (column 7, lines 24-25), i.e. self-lubricating bushings.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the bushings of Shaw to be the self-lubricating polymer type disclosed by McAnally, as McAnally teaches that these types of bushings were "corrosion resistant" and useful "for submersible pump applications" (column 7, lines 13-16).

With regard to claims 3-5 and 18, Shaw discloses a splined connection between the motor section shaft and the motor protector section shaft, but fails to disclose a threaded or cross bolt connection.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided a threaded connection, cross-bolt connection, or interference fit connection in place of the splined connection disclosed by Shaw, as examiner hereby takes Official Notice that any of these equivalent connections would have been equally effective at affixing the two shafts with respect to an axis transverse to the longitudinal axis of the motive unit, and further because

applicant has provided no criticality for the selection of one type of connection over the other, as evidenced by the fact that applicant has claimed all three types of connections.

With regard to claim 7, Shaw discloses a protector section head (40) with lateral sand escape holes (41) disposed above a protector section bearing (48).

With regard to claim 8, Shaw discloses a shroud (50) protecting a bearing (42).

With regard to claims 15 and 25, Shaw discloses a plurality of oil communication holes (25d, 30h, 44h, 44g, 21a) deployed at an angle with respect to the longitudinal axis of the motive unit.

With regard to claims 16, 27, 28, and 31, Shaw discloses forming a motive unit by connecting a motor section shaft (1d) to a protector section shaft (5) to form an axially affixed connection (wherein the axis is transverse to the longitudinal axis of the motive unit); placing a sealed housing (20) about the axially affixed connection to form a combined motor section and protector section, prefilling the combined motor section and protector section with a lubricating fluid prior to placing the motive unit downhole (see column 2, lines 3-7), and forming a protector section head (40) with lateral sand escape holes (41) disposed above a protector section bearing (48).

With regard to claim 17, Shaw discloses placing the motive unit downhole.

With regard to claim 19, Shaw discloses threadably connecting the motor housing to the protector housing via bolts (1c).

With regard to claim 23, Shaw fails to disclose self-lubricating bushings, however, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the bushings of Shaw to be the self-

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lubricating polymer type disclosed by McAnally, as McAnally teaches that these types of bushings were "corrosion resistant" and useful "for submersible pump applications" (column 7, lines 13-16).

With regard to claim 26, Shaw discloses constructing a motive unit having a longitudinal axis for a submersible pumping system with a motor section (1) and a protector section (10) combined; delivering the motive unit to an oil production well as a single unit; and providing the motive unit with a plurality of oil communication holes (25d, 30h, 44h, 44g, 21a) deployed at a nonzero angle with respect to the longitudinal axis such that the angle of the plurality of oil communication holes corresponds with an angle at which the motive unit is positioned relative to vertical during filling of the motive unit with oil.

With regard to claim 29, Shaw fails to disclose provided a single, unitary shaft, however, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided a single, unitary shaft instead of the jointed shaft disclosed by Shaw, in order to have provided for a stronger driveshaft and furthermore because it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1993).

With regard to claim 30, Shaw discloses a coupling sleeve (2) connecting the motor shaft and protector shafts. Examiner notes that the connection in the instant application is not truly permanent, even in the case that the motor shaft and the protector shaft are one piece, as they could be separated by a cutting torch or similar

device. Therefore, inasmuch as the connection between the motor shaft and protector shaft in the instant application is permanent, the Shaw connection is also permanent.

With regard to claim 33, Shaw fails to disclose self-lubricating bushings as discussed above with respect to claim 1, however, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the bushings of Shaw to be the self-lubricating polymer type disclosed by McAnally, as McAnally teaches that these types of bushings were "corrosion resistant" and useful "for submersible pump applications" (column 7, lines 13-16).

7. Claims 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. in view of McAnally as applied to claims 1 and 16 above, and further in view of Shilman (RU 2162272 C1).

Shaw in view of McAnally discloses an electric submersible motor (14), but fails to disclose the motor comprising a spring biased terminal block.

Shilman discloses an electrical connection having a spring biased terminal block (16). The terminal block is biased towards a sealed position, so that fluid communication is allowed when the plug is inserted, and not allowed when the plug is not inserted (see page 4 of the translation, paragraph 3).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided the motor of Shaw in view of McAnally with the connection module of Shilman, as Shilman's module would have "ensure[d] equalization of pressure in the cavity with that of the liquid within the well. As a result,

the cable entry [would not have been] exposed to differential pressure – a factor that [would have ensured] its reliable sealing and long-term serviceability."

8. Claims 9-11, 22, 32, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. in view of McAnally as applied to claims 1, 16, and 26 above, and further in view of Kinsinger (US 6,091,175).

With regard to claims 9, 10, 22, 32, and 42, Shaw discloses conventional journal bearings (42, 48, 26, etc.) within the motive unit, but fails to disclose the journal bearings having replaceable wear sleeves.

Kinsinger discloses a bearing assembly for a submersible pump motor comprising a journal bearing having a replaceable wear sleeve (48), which is non-rotatably connected to the shaft (26) via a key (see column 4, lines 30-34), and is made of a soft metal such as bronze or brass (see column 4, lines 56-57). Therefore, though not explicitly stated, the wear sleeves of Kinsinger appear to be designed to bear the brunt of the wear due to friction as they are made of a soft metal.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided the bearings of Shaw in view of McAnally with replaceable wear sleeves as disclosed by Kinsinger, in order to have absorbed the friction caused by rotation of the shaft, thereby preventing undue wear to the shaft and housing.

With regard to claims 11 and 43, Shaw in view of McAnally, further in view of Kinsinger simply discloses wear sleeves which are keyed to the shaft, but does not disclose the sleeves being press fit onto the shaft with a tolerance ring.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used a press fit and tolerance ring connection between the shaft and sleeve rather than the keyed connection taught by Kinsinger, as examiner hereby takes Official Notice of the equivalency of these connections, and furthermore because applicant has not provided any criticality for the choice of one connection over the other, as evidenced by the fact that applicant has claimed both types of connections.

With regard to claim 44, Shaw discloses multiple bearings, therefore each bearing would have been provided with the wear sleeve taught by Kinsinger.

With regard to claim 45, Shaw discloses a motor section and protector section assembled as a single unit.

9. Claims 13 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw in view of McAnally as applied to claims 1 and 26 above, and further in view of Vandevier (US 4,521,708).

Shaw in view of McAnally fails to disclose the bearings being rotor bearings with spring-loaded keys.

Vandevier discloses a submersible motor comprising rotor bearings (37) having spring-loaded keys (51).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided the bearings of Shaw in view of McAnally with spring-loaded keys as disclosed by Vandevier, in order to have provided "a positive means for the bearing to engage the stator to prevent rotation" (see column

3, lines 63-65), thereby reducing "heat and metal surfaces galling which ultimately leads to oil contamination and dielectric breakdown" (see column 1, lines 44-46). The spring-loaded keys would have also allowed "easy insertion of the rotor into the stator" (see column 3, lines 67-68), thereby reducing assembly time.

10. Claims 14, 24, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. in view of McAnally as applied to claims 1, 16, and 26 above, and further in view of Howell et al. (US 6,602,059).

Shaw in view of McAnally fails to disclose placing a sensor within the motor section.

Howell discloses a submersible motor and protector assembly having a sensor (30) within the motor (18).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have included a sensor within the motor of Shaw, as Howell teaches that "one skilled in the art [would have understood] that it can be advantageous to attach an optional sensor to the motor" (column 2, lines 33-36) in order to have enabled an operator at the surface to monitor downhole conditions.

11. Claims 1, 3-5, 8, 9, 15, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merrill et al. (US 2004/0146415) in view of McAnally (US 5,992,517).

With regard to claims 1 and 33, Merrill discloses a system for producing oil comprising a submersible pump (12) and a motive unit (10, 14) to power the pump, the motive unit being a single device with a motor section (14) and a protector section (10) to seal the motor section from surrounding fluid and to accommodate thermal expansion

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of lubricating fluid during production of oil, wherein the motive unit comprises a plurality of bearings having bushings (24, 32). Although the connection between the motor section shaft and the motor protector section shaft (26) is not shown, they are inherently connected as the protector section is disposed between the pump and the motor. Therefore, the motor shaft would have to be connected to the motor protector shaft in order to drive the pump shaft. The motor shaft and motor protector shaft are axially affixed with reference to an axis transverse to the longitudinal axis of the motive unit. The splined connection of the two shafts prevents movement, or wobbling, of the shafts in a direction transverse to said longitudinal axis.

Merrill fails to teach that the bushings are self-lubricating bushings.

McAnally discloses a submersible pump apparatus for producing fluid from a well. McAnally teaches the use of "bearing sleeve[s] of...polymer materials" (column 7, lines 24-25).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the bushings of Merrill to be the self-lubricating polymer type disclosed by McAnally, as McAnally teaches that these types of bushings were "corrosion resistant" and useful "for submersible pump applications" (column 7, lines 13-16).

With regard to claims 3-5, Merrill discloses a or splined connection between the motor section shaft and the motor protector section shaft, but fails to disclose a threaded connection, a cross bolt connection, or an interference fit.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided a threaded or cross-bolt connection in place of the splined connection disclosed by Merrill, as examiner hereby takes Official Notice of the equivalence of these types of connections for connecting two torque-transmitting shafts together, and further because applicant has provided no criticality for the selection of one type of connection over the other, as evidenced by the fact that applicant has claimed all three types of connections.

With regard to claim 8, the protector section further comprises a bearing (36) and a shroud (30) protecting the bearing from sand.

With regard to claim 9, Merrill discloses journal bearings having replaceable wear sleeves (inner sleeves in bearing assemblies **36** and **86**).

With regard to claim 15, Merrill discloses a plurality of oil communication holes (proximate reference numerals 50, 54, and 36 in figures 1A and 1B) which are at a nonzero angle to an axis of the motive unit, so long as that axis is not the longitudinal axis of the motive unit.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merrill et al. in view of McAnally as applied to claim 1 above, and further in view of Shilman (RU 2162272 C1).

Merrill in view of McAnally discloses an electric submersible motor (14), but fails to disclose the motor comprising a spring biased terminal block.

Shilman discloses an electrical connection having a spring biased terminal block (16). The terminal block is biased towards a sealed position, so that fluid

communication is allowed when the plug is inserted, and not allowed when the plug is not inserted (see page 4 of the translation, paragraph 3).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided the motor of Merrill in view of McAnally with the connection module of Shilman, as Shilman's module would have "ensure[d] equalization of pressure in the cavity with that of the liquid within the well. As a result, the cable entry [would not have been] exposed to differential pressure – a factor that [would have ensured] its reliable sealing and long-term serviceability."

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merrill et al. in view of McAnally as applied to claim 1 above, and further in view of Howell et al. (US 6,602,059).

Merrill in view of McAnally fails to disclose placing a sensor within the motor section.

Howell discloses a submersible motor and protector assembly having a sensor (30) within the motor (18).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have included a sensor within the motor of Merrill in view of McAnally, as Howell teaches that "one skilled in the art [would have understood] that it can be advantageous to attach an optional sensor to the motor" (column 2, lines 33-36) in order to have enabled an operator at the surface to monitor downhole conditions.

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14. Claims 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merrill et al.

With regard to claim 29, Merrill fails to disclose provided a single, unitary shaft.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have provided a single, unitary shaft instead of the jointed shaft disclosed by Merrill, in order to have provided for a stronger driveshaft and furthermore because it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art.

*Howard v. Detroit Stove Works*, 150 U.S. 164 (1993).

15. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Merrill et al. in view of Howell et al. (US 6,602,059).

Merrill fails to disclose placing a sensor within the motor section.

Howell discloses a submersible motor and protector assembly having a sensor (30) within the motor (18).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have included a sensor within the motor of Merrill, as Howell teaches that “one skilled in the art [would have understood] that it can be advantageous to attach an optional sensor to the motor” (column 2, lines 33-36) in order to have enabled an operator at the surface to monitor downhole conditions.

### ***Allowable Subject Matter***

16. Claims 47-51 are allowed.

### ***Response to Arguments***

17. Applicant's arguments filed October 16, 2007 have been fully considered but they are not persuasive.

With respect to the Merrill reference, applicant has argued that Merrill does not disclose an axially affixed connection between the motor shaft and the protector shaft, that Merrill does not disclose oil communication holes at an angle with the longitudinal axis of the motive unit, that Merrill does not disclose journal bearings having replaceable wear sleeves, that Merrill does not disclose prefilling the motive unit with oil, and that Merrill does not disclose delivering the motive unit to a well as a single unit.

Examiner respectfully traverses each of these arguments.

Merrill does disclose an axially affixed connection between the motor and protector shafts, as applicant has not indicated *which* axis is the pertinent axis. The shafts are certainly affixed with respect to an axis transverse to the longitudinal axis of the motive unit.

Merrill does disclose oil communication holes at an angle with respect to the longitudinal axis of the motive unit, as an "angle of zero" is still *an* angle, even though its value is zero. The pertinent claims must specify that the angle is "nonzero," and that "an axis" is the longitudinal axis of the motive unit.

Merrill does disclose journal bearings having replaceable wear sleeves, as the claim does not contain any structure which defines what a wear sleeve is, i.e. that it rotates with the shaft and absorbs friction, etc. Since Merrill discloses journal bearings that comprise two sleeves, examiner sees nothing that would preclude defining the inner sleeves of each journal bearing assembly to be replaceable wear sleeves. With

regard to the term "replaceable," the sleeves are certainly replaceable, even if replacing them might require dismantling the entire motive unit.

Merrill discloses prefilling the motive unit with oil, as the claims do not specify that the motive unit is prefilled *prior to* any particular step. Examiner reasons that the motive unit is prefilled prior to placing the motive unit within the well, as no filling line connected to the surface is described in Merrill's specification.

Merrill teaches delivering the motive unit to a well as a single device. Examiner respectfully asserts that delivering the motive unit to a well could encompass placing the device downhole. Delivering to a well does not necessarily mean shipping the device from a manufacturer to a well site.

With respect to the Shilman reference, applicant has argued that Shilman does not disclose an "entire" terminal block that is movable between a sealed position and an open position. Examiner notes that the word "entire" is not in the claim. Examiner sees no structure within the claims that precludes defining item 16 in Shilman as the "terminal block." All the claims require is that the terminal block is movable between a sealed position and an open position to allow fluid communication, and that the terminal block be spring biased. Item 16 in Shilman is perfectly consistent with this language. Applicant also argued that Shilman does not disclose dielectric gaskets. Examiner respectfully points out that Shilman's gaskets are made of rubber, which is nonconducting. Examiner understands "dielectric" to mean "insulating," or "nonconducting."

***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references are additional examples of bearing systems in submersible motors.
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert E. Fuller whose telephone number is 571-272-0419. The examiner can normally be reached on Monday thru Friday from 8:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jennifer H. Gay  
Supervisory Patent Examiner  
Art Unit 3676

12/05/2007  
REF